Cupola Protective Ensemble (CPE)



The Cupola Protective Ensemble (CPE) is designed to protect U.S. forces in Iraq from the blast overpressure and fragmentation effects of rocket propelled grenades (RPGs) and improvised explosive devices (IEDs) while manning crew-served, weapon-ring mount cupolas on military vehicles such as HMMWV, 5-Ton Trucks, and Stryker Armored Vehicles.

Performance Characteristics

The CPE is a modified countermine ensemble with a blast and fragmentation protective visor, trousers, jacket, front and rear blast plates, and an upper torso cooling system. The CPE is worn over the standard Interceptor Body Armor, extending protection to the head, neck, face and extremities. The integrated cooling system offsets heat effects. A contoured Kevlar neck guard provides protection for neck and temporal lobes. The CPE consists of the following:

- · Base jacket
- Sleeves (left and right) with rigid composite inserts (forearm and bicep)
- Blast plate assembly chest and groin
- Rear blast plate
- · Pants and integrated groin protector (IGP)
- Removable explosive ordnance disposal collar
- Optional neck/nape guard
- Visor System worn with Personal Armor System Ground Troops (PASGT) or Army Combat Helmet (ACH)
- · Hand Guards



System Description

Component Materials: Kevlar, Kevlar/Nomex Advance Ripstop, Nomex, Spectra Shield, nylon, Cordura, acrylic, polycarbonate

Color: Tan

Basis of Issue: To be determined

Status:

- User experiment with transport unit in Iraq in 10FY05
- CJTF 76 ONS received 1QFY05
- ATC Human Factors Engineering testing 20FY05
- Live Fire Testing RPG conducted 4QFY05
- ATC Blast Testing conducted 20FY05
- Proof of principle testing May 2005-UTC in OIF/OE









CPE Jacket Visor with Neck Guard Hand Guards



Interceptor Body Armor (not issued with the CPE)



Cooling Vest



CPE Pants with Integrated Groin Protector

